

BookletChartTM

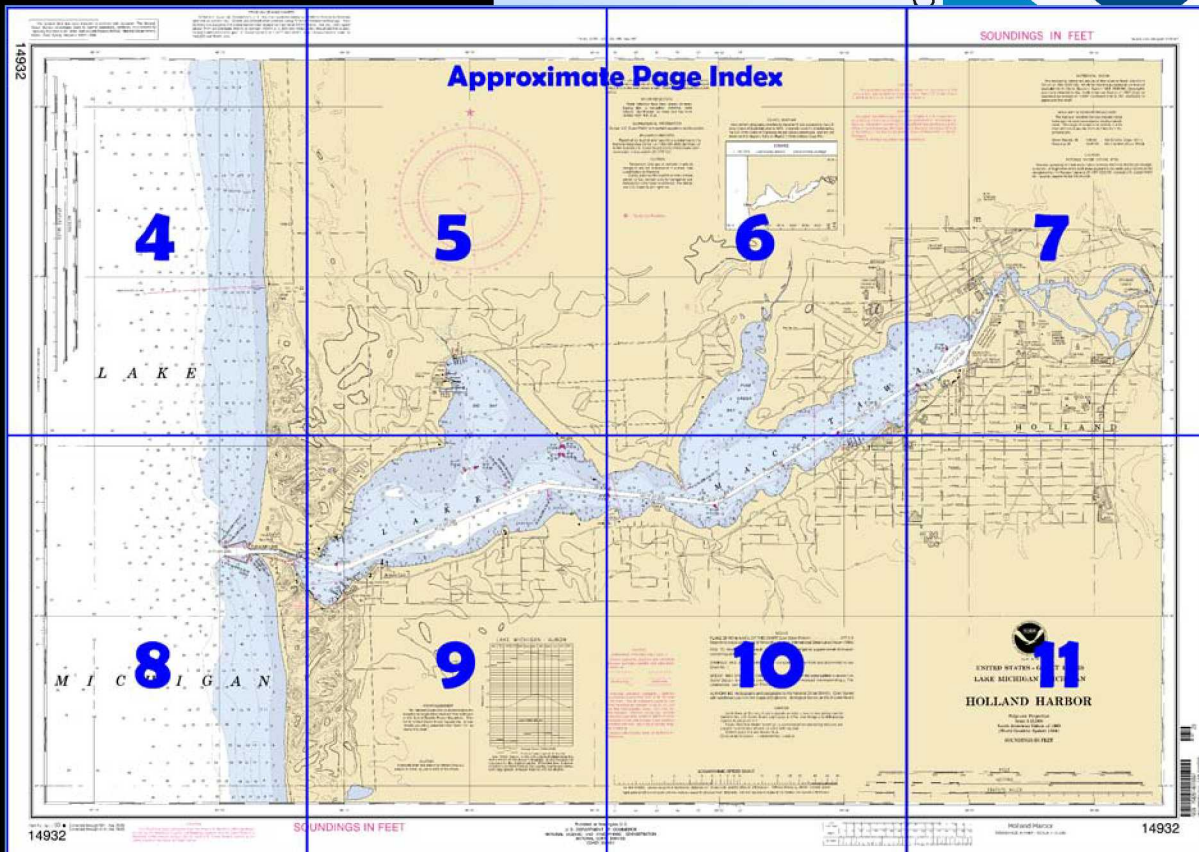
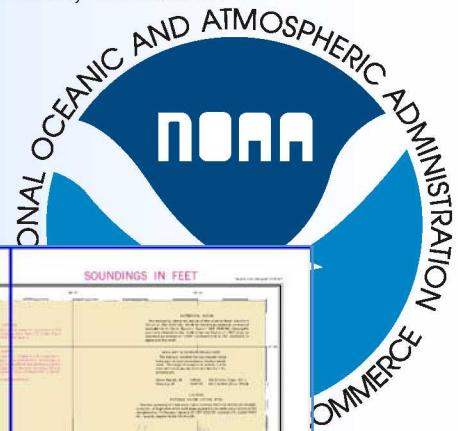
Holland Harbor

(NOAA Chart 14932)



A reduced scale NOAA nautical chart for small boaters. When possible, use the full size NOAA chart for navigation.

- ✓ Complete, reduced scale nautical chart
- ✓ Print at home for free
- ✓ Convenient size
- ✓ Up to date with all Notices to Mariners
- ✓ United States Coast Pilot excerpts
- ✓ Compiled by NOAA, the nation's chartmaker.



Home Edition (not for sale)



What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart™?

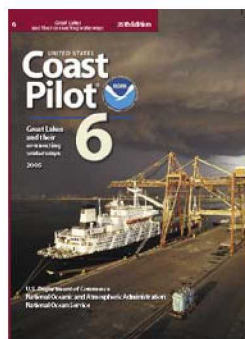
This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <http://www.NauticalCharts.NOAA.gov>.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.



[Coast Pilot 6, Chapter 11 excerpts]

(326) **Holland Harbor**, 63 miles S of Little Sable Point, is formed by **Lake Macatawa**, which is connected to Lake Michigan at its W end by an improved channel. The lake extends 5 miles E to its head at the mouth of **Macatawa River** and has a least width of 1,000 feet near its midlength. The width increases to over 1 mile in the vicinity of **Big Bay** and **Pine Creek Bay**, two large indentations in the N shore of the lake. The city of **Holland, Mich.**, fronts the E shore and

much of the S shore of the lake. **Macatawa, Mich.**, is a small resort community on the SW side of the lake. The principal commodities handled in the port are coal, salt, cement, stone, and agricultural chemicals.

(327) **Holland Harbor North Breakwater Light** (42°46.4'N., 86°13.0'W.), 27 feet above the water, is shown from a white cylindrical tower with a green band on the outer end of the breakwater.

(334) **Holland Coast Guard Station** is on the N side of Lake Macatawa near the harbor entrance.

Harbor regulations

(335) Federal regulations specify a **speed limit** of 8 mph (7 knots) in Lake Macatawa. (See **33 CFR 162.120**, chapter 2, for regulations.) State regulations specify a **slow-no wake speed** off Central Park near midpoint of the lake, off Kollen Park at the E end of the lake, and from the mouth of Macatawa River upstream to a point 1,500 feet above the River Avenue bridge.

(342) There are numerous marinas throughout Lake Macatawa. Gasoline, diesel fuel, water, ice, electricity, sewage pump-out facilities, marine supplies, and launching ramps are available. Several lifts to 60 tons are available for hull, engine, and electronic repairs.

Table of Selected Chart Notes

Pump-out Facilities

Corrected through NM Apr. 26/03
Corrected through LNM Apr. 08/03

Polyconic Projection
Scale 1:15,000
North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FEET

RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

CAUTION

Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

During some winter months or when endangered by ice, certain aids to navigation are replaced by other types or removed. For details see U.S. Coast Guard Light List.

CAUTION

SUBMARINE PIPELINES AND CABLES

Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:



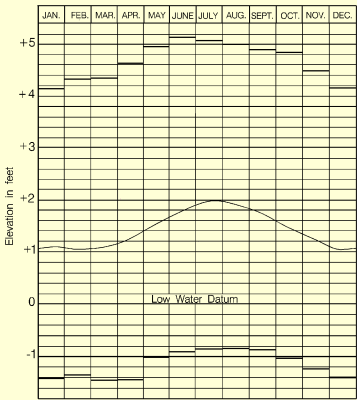
Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling.

Covered wells may be marked by lighted or unlighted buoys.

POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

LAKE MICHIGAN - HURON



Low Water Datum, which is the plane of reference for the levels shown on the above hydrograph, is also the plane of reference for the charted depths. If the lake level is above or below Low Water Datum, the existing depths are correspondingly greater or lesser than the charted depths.

NOAA VHF-FM WEATHER BROADCASTS

The National Weather Service stations listed below provide continuous marine weather broadcasts. The range of reception is variable, but for most stations is usually 20 to 40 miles from the antenna site.

Station	Frequency	Channel
Grand Rapids, MI	KIG-63	162.55 MHz (Chan. WX-1)
Hesperia, MI	WWF-36	162.475 MHz (Chan. WX-3)

SUPPLEMENTAL INFORMATION

Consult U.S. Coast Pilot 6 for important supplemental information.

HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.086' northward and 0.144' westward to agree with this chart.

CAUTION

Due to periodic high water conditions in the Great Lakes, some features charted as visible at Low Water Datum may be submerged, particularly in the near shore areas. Mariners should proceed with caution.

WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot 6 for details.

SOURCE DIAGRAM

Most of the hydrography identified by the letter "J" was surveyed by the U.S. Army Corps of Engineers prior to 1974. Channels currently maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

CAUTION

POTABLE WATER INTAKE (PWI)

Vessels operating in fresh water lakes or rivers shall not discharge sewage, or ballast, or bilge water within such areas adjacent to domestic water intakes as are designated by the Surgeon General (21 CFR 1250.93). Consult U.S. Coast Pilot 6 for important supplemental information.

CAUTION

Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Imagery and Mapping Agency Publication 117.

Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.

Station positions are shown thus:

⊙ (Accurate location) ◦ (Approximate location)

CAUTION

This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Imagery and Mapping Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner.

This nautical chart has been designed to promote safe navigation. The National Ocean Service encourages users to submit corrections, additions, or comments for improving this chart to the Chief, Marine Chart Division (N/CS2), National Ocean Service, NOAA, Silver Spring, Maryland 20910 - 3282.

AIDS TO NAVIGATION. Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

SYMBOLS AND ABBREVIATIONS. For complete list of symbols and abbreviations see Chart No. 1.

BRIDGE AND OVERHEAD CABLE CLEARANCES. When the water surface is above Low Water Datum, bridge and overhead clearances are reduced correspondingly. For clearances see U.S. Coast Pilot 6.

AUTHORITIES. Hydrography and topography by the National Ocean Service, Coast Survey with additional data from the Corps of Engineers, Geological Survey, and U.S. Coast Guard.

PLANE OF REFERENCE OF THIS CHART (Low Water Datum).....577.5 ft.
Referred to mean water level at Rimouski, Quebec, International Great Lakes Datum (1985).

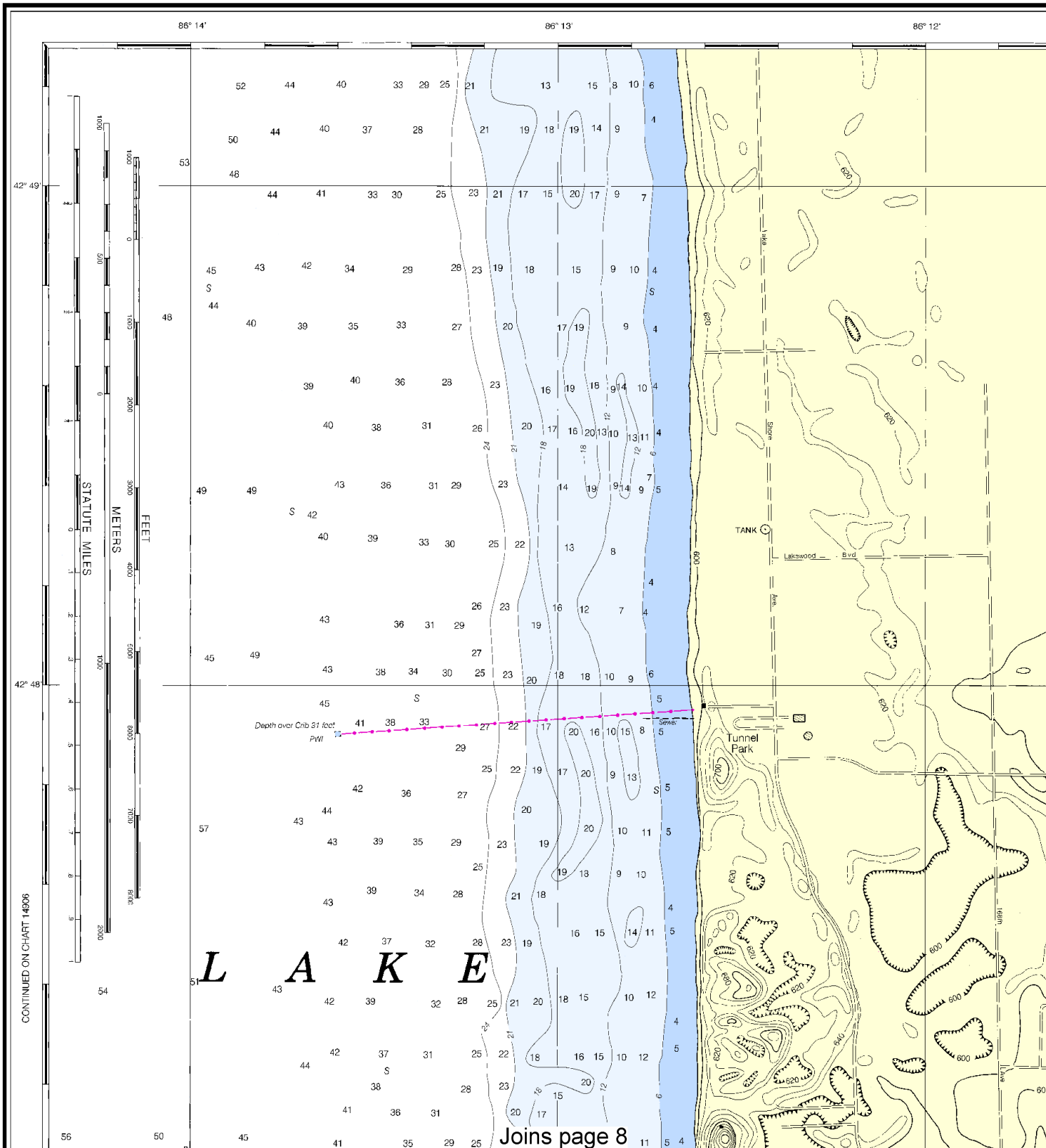
PRINT-ON-DEMAND CHARTS

NOAA and its partner, OceanGrafix, offer this chart updated weekly by NOAA for Notices to Mariners and critical corrections. Charts are printed when ordered using Print-on-Demand technology. New Editions are available 5-8 weeks before their release as traditional NOAA charts. Ask your chart agent about Print-on-Demand charts or contact NOAA at 1-800-584-4683, <http://NauticalCharts.gov>, help@NauticalCharts.gov, or OceanGrafix at 1-877-56CHART, <http://OceanGrafix.com>, or help@OceanGrafix.com.

14932

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4



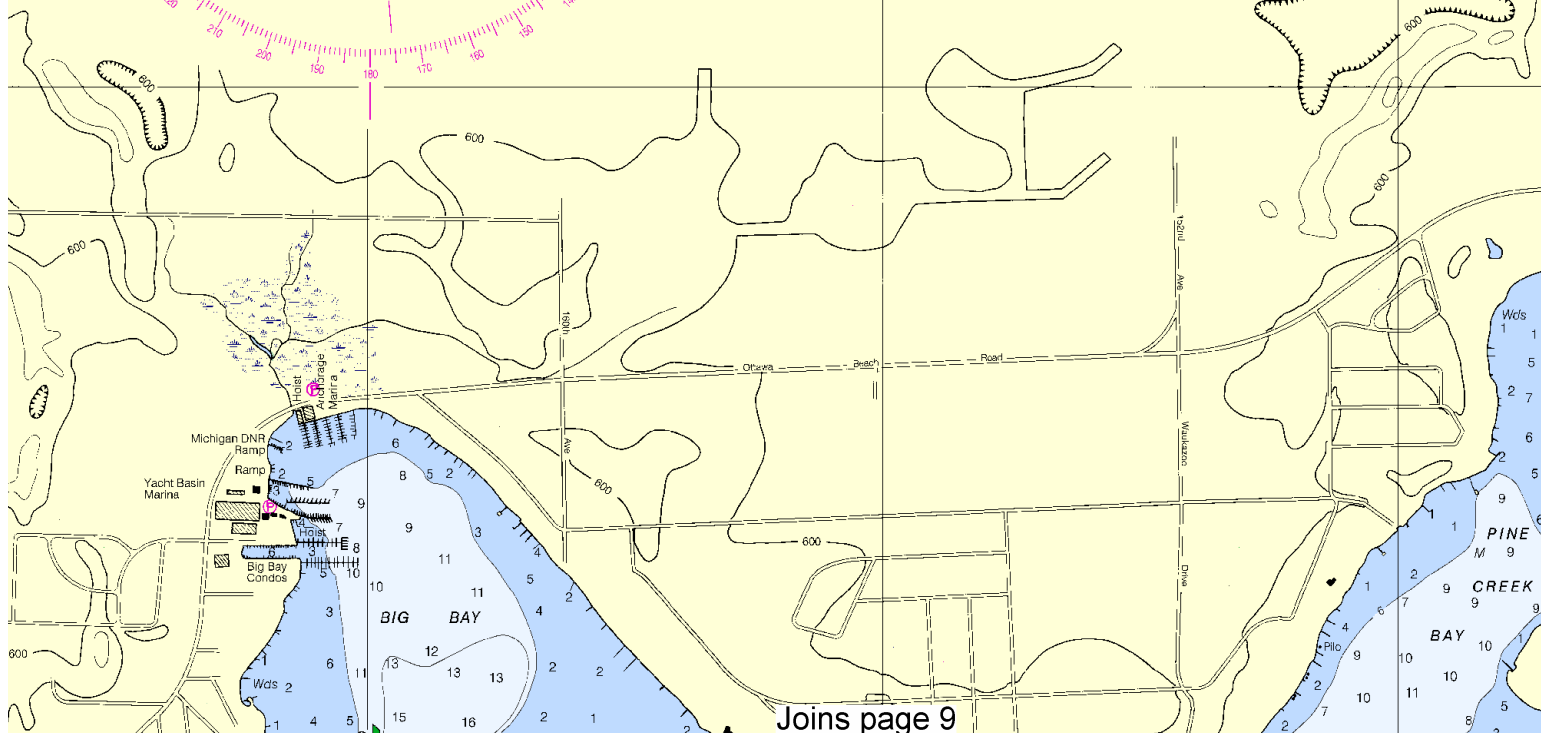
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SCALE 1:15,000
Nautical Miles

See Note on page 5.



85°14'	86°13'	8
--------	--------	---



5

1' 85° 10' 50' 40' 30' 20' 10' 86° 09' 50' 86°

CAUTION
Due to periodic high water conditions in the Great Lakes, some features charted as visible at Low Water Datum may be submerged, particularly in the near shore areas. Mariners should proceed with caution.

RADAR REFLECTORS
Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

SUPPLEMENTAL INFORMATION
Consult U.S. Coast Pilot 6 for important supplemental information.

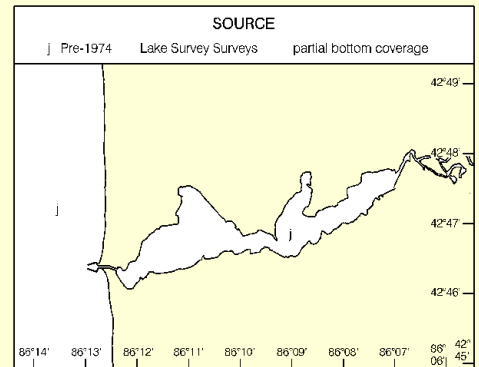
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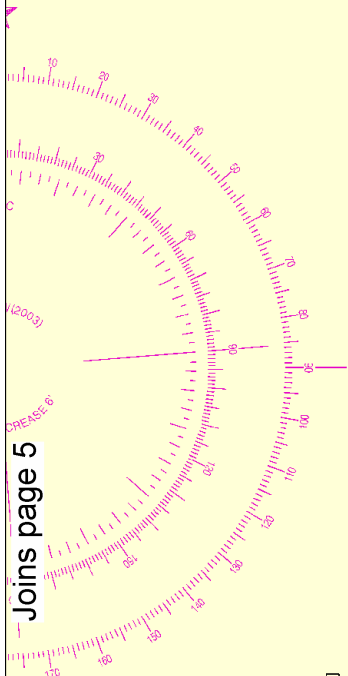
During some winter months or when endangered by ice, certain aids to navigation are replaced by other types or removed. For details see U.S. Coast Guard Light List.

SOURCE DIAGRAM

Most of the hydrography identified by the letter 'I' was surveyed by the U.S. Army Corps of Engineers prior to 1974. Channels currently maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, *United States Coast Pilot*.



P Pump-out Facilities



Joins page 5



6



Printed at reduced scale.

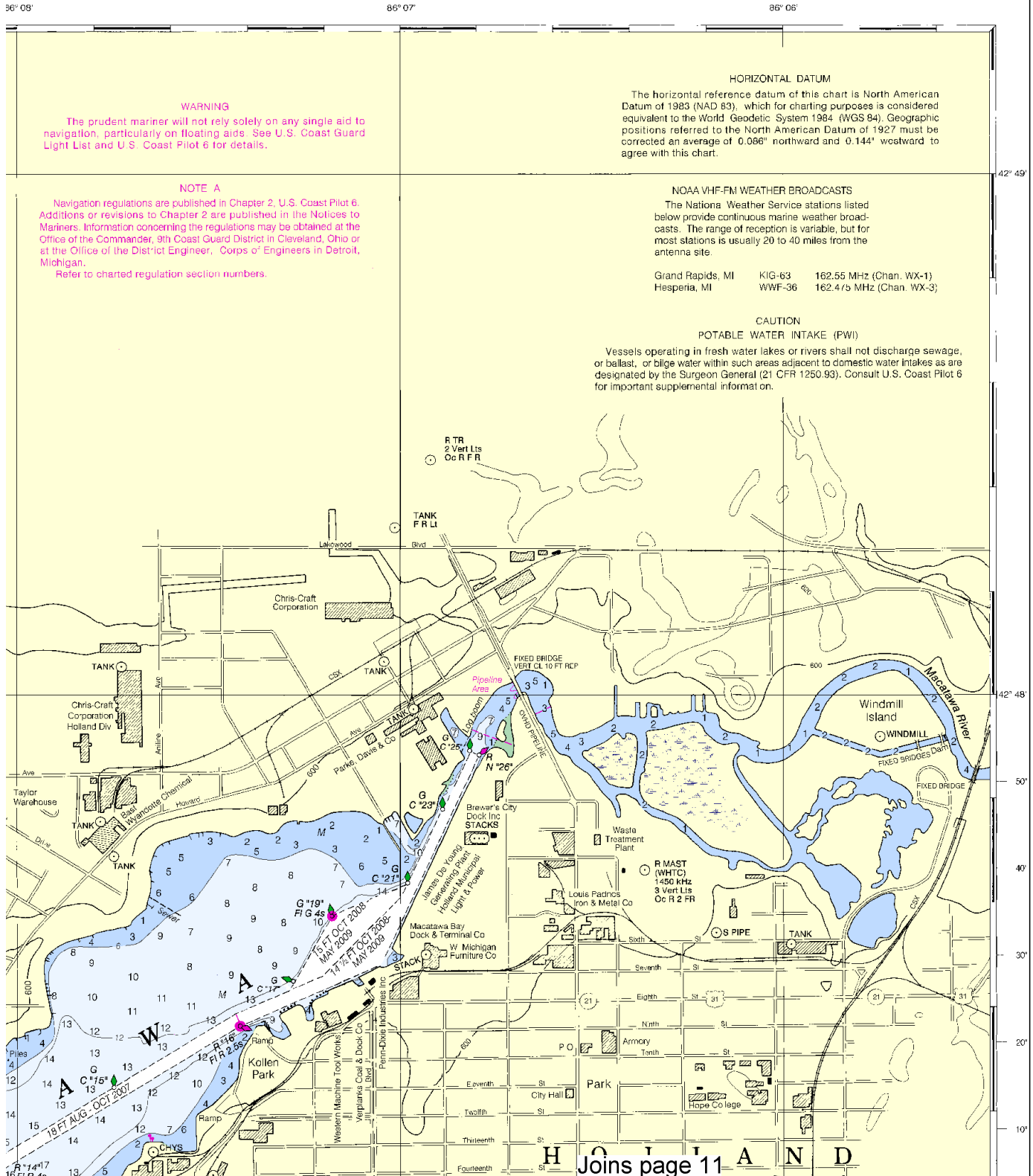
SCALE 1:15,000
Nautical Miles

See Note on page 5.



SOUNDINGS IN FEET

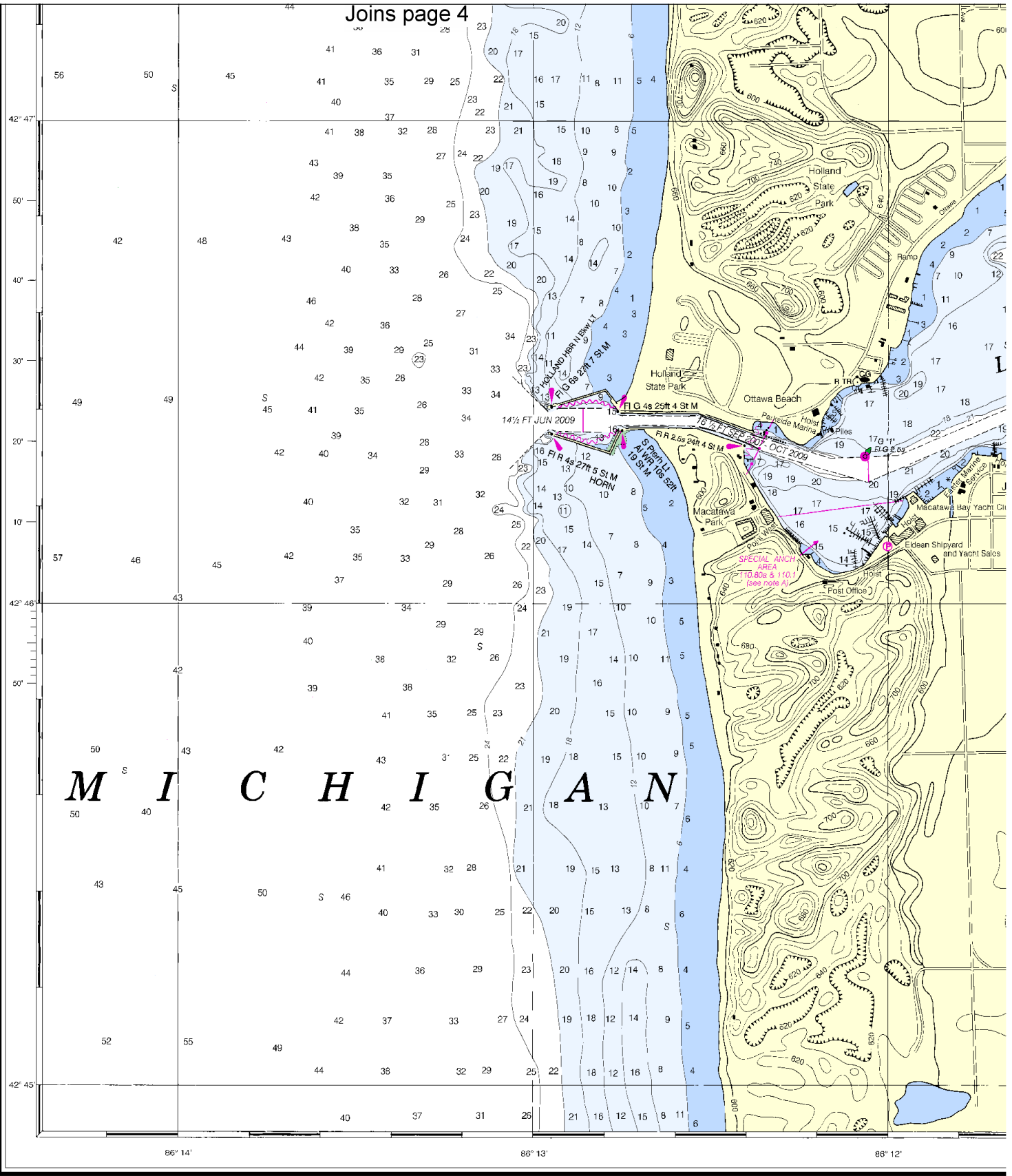
Nautical Chart Catalog No. 4, Panel C



This BookletChart has been updated with: Coast Guard Local Notice To Mariners: 0710 2/16/2010,
 NGA Weekly Notice to Mariners: 0910 2/27/2010,
 Canadian Coast Guard Notice to Mariners: 0110 1/29/2010.

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Joins page 4



23rd Ed., Apr. / 03 ■ Corrected through NM Apr. 26/03
Corrected through LNM Apr. 08/03

14932

CAUTION

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SOUNDINGS IN FI

8

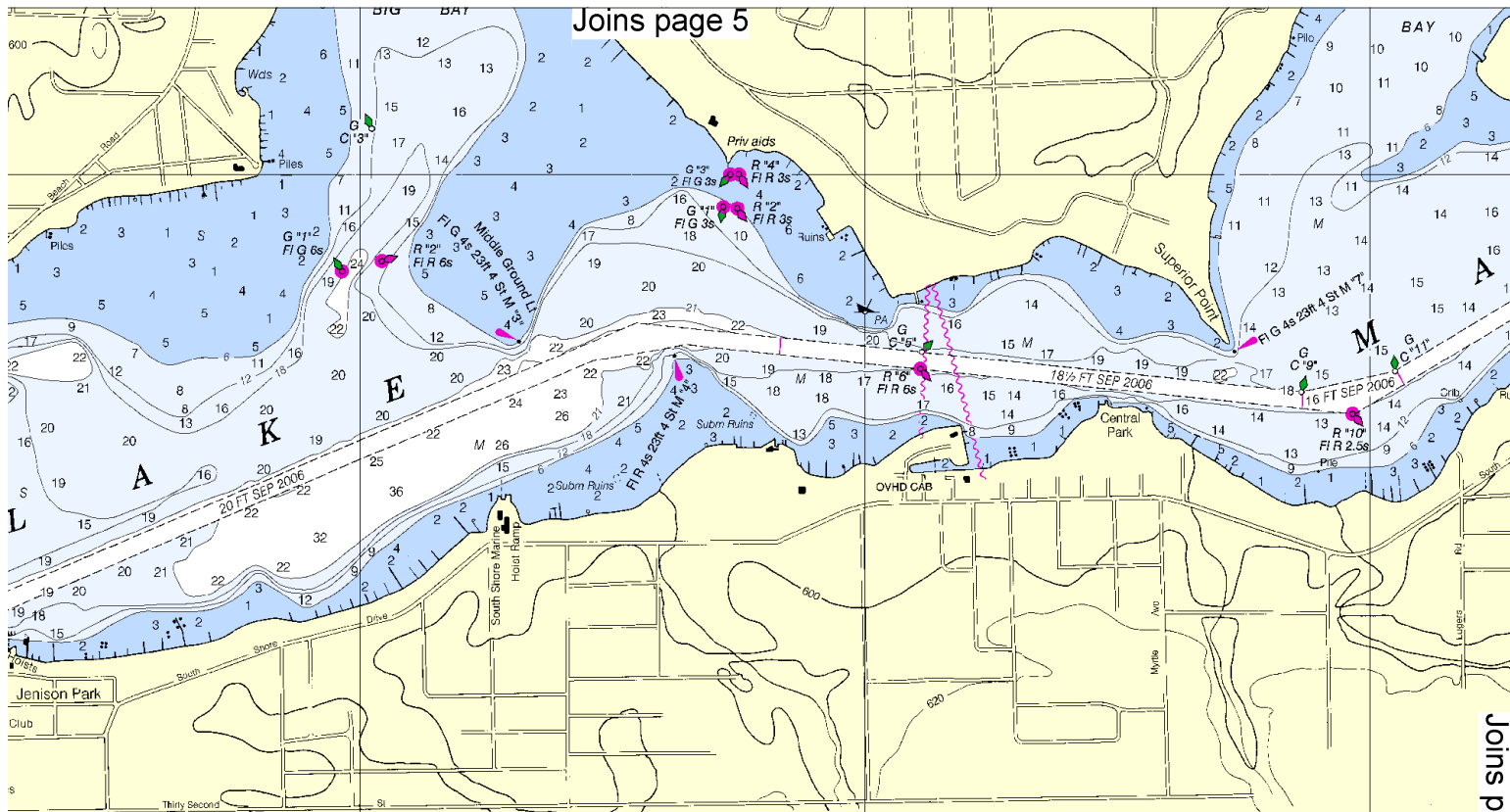


Printed at reduced scale.

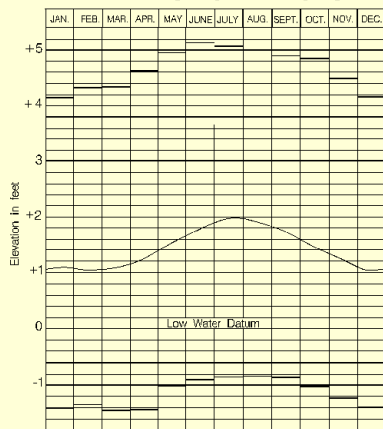
~~SCALE 1:15,000~~
Nautical Miles

See Note on page 5.





LAKE MICHIGAN - HURON



ACKNOWLEDGMENT

The National Ocean Service acknowledges the exceptional cooperation received from members of the Grand Rapids Power Squadron, District 9, United States Power Squadrons, in continually providing essential information for revising this chart.

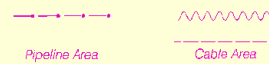
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CAUTION

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Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:



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Covered wells may be marked by lighted or unlighted buoys.

PLANE OF REFERENCE
Referred to mean water level

AIDS TO NAVIGATION, C
concerning aids to navigat

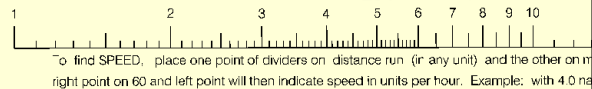
SYMBOLS AND ABBREVI
Chart No. 1.

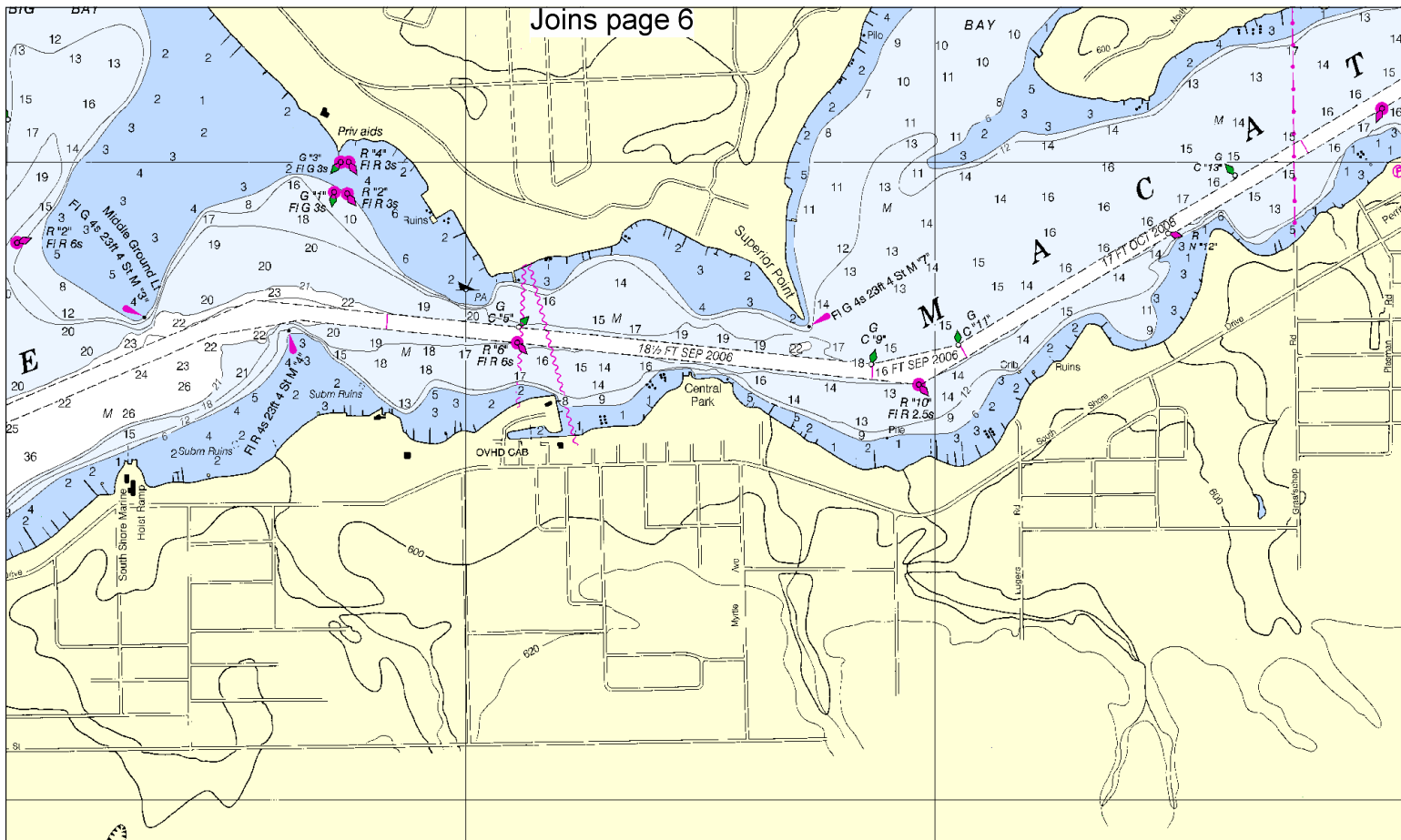
BRIDGE AND OVERHEAD
Water Datum, bridge and
clearances see U.S. Coa

AUTHORITIES. Hydrograph
with additional data from the

Limitations on the
found in the U.S. Coa
Agency Publication 1
Radio direction-f
subject to error and
Station positions
(Accurate location)

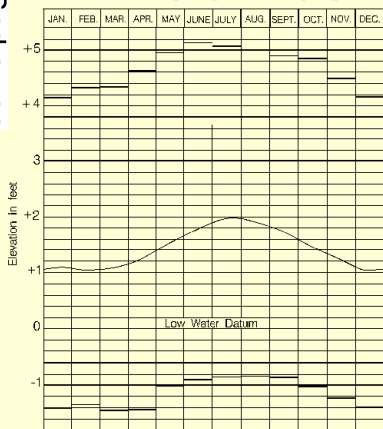
LOGARITHMIC SPEED SCALE





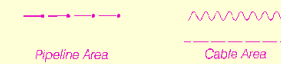
Joins page 9

LAKE MICHIGAN - HURON



Average levels (1893-2002)
Extreme Levels (period of record)
Low Water Datum, which is the plane of reference for the levels shown on the above hydrograph, is also the plane of reference for the charted depths. If the lake level is above or below Low Water Datum, the existing depths are correspondingly greater or lesser than the charted depths.

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Covoroc wells may be marked by lighted or unlighted buoys.

NOTES

PLANE OF REFERENCE OF THIS CHART (Low Water Datum).....37
Referred to mean water level at Rimouski, Quebec, International Great Lakes Datum.

AIDS TO NAVIGATION. Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

SYMBOLS AND ABBREVIATIONS. For complete list of symbols and abbreviations, see U.S. Coast Pilot 6.

BRIDGE AND OVERHEAD CLEARANCES. When the water surface is above Water Datum, bridge and overhead clearances are reduced correspondingly; see U.S. Coast Pilot 6.

AUTHORITIES. Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, and U.S. Coast Guard.

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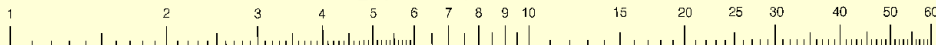
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Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.

Station positions are shown thus:

⊙ (Accurate location) ⊙ (Approximate location)

LOGARITHMIC SPEED SCALE



To find SPEED, place one point of dividers on distance run (in any unit) and the other on minutes run. Without changing divider spread, place right point on 60 and left point will then indicate speed in units per hour. Example: with 4.0 nautical miles run in 15 minutes, the speed is 16.0 knots

Published at Washington, D.C.
U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE
COAST SURVEY

FATHOMS	
FEET	
METERS	

10

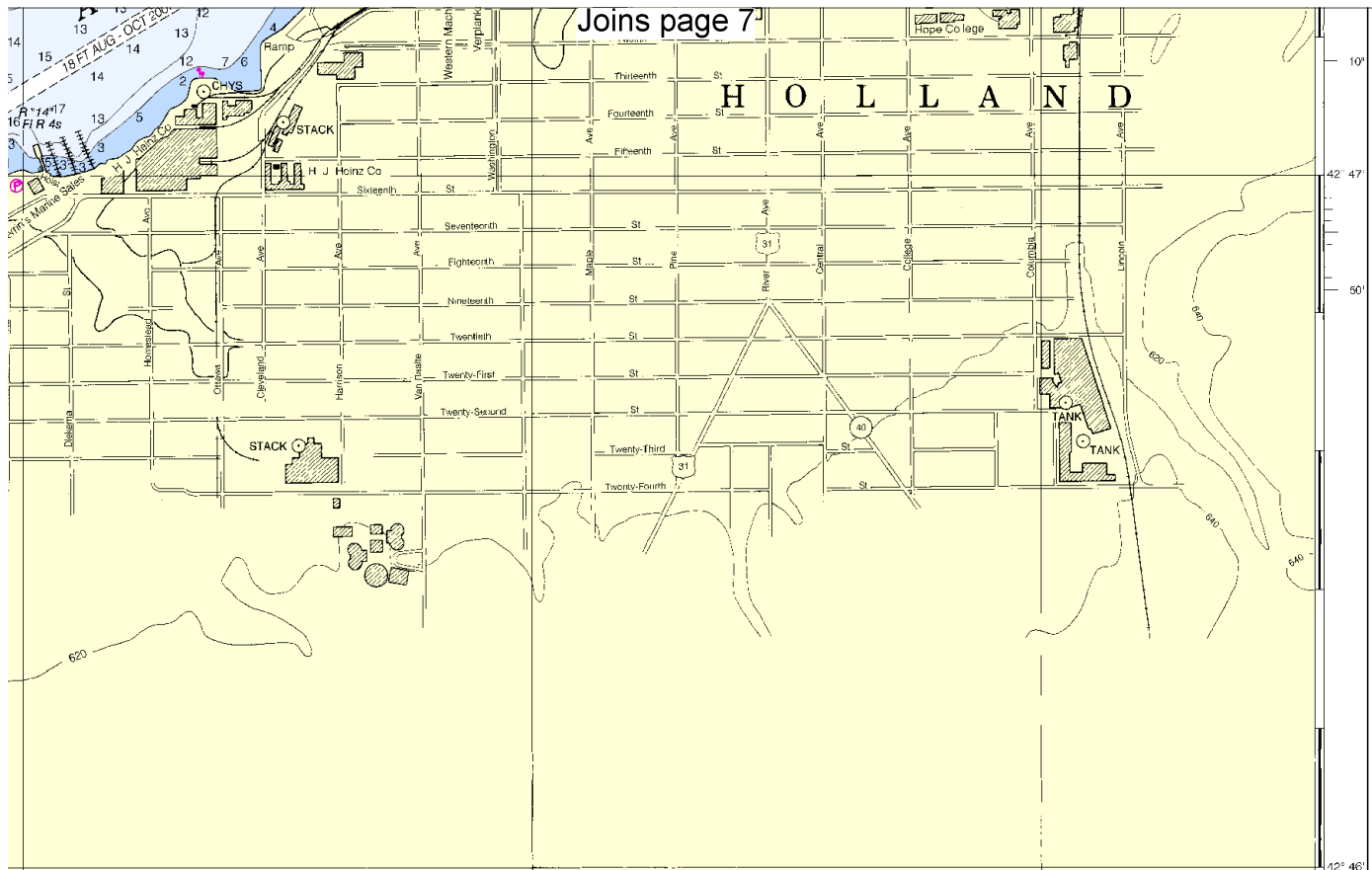


Printed at reduced scale.

SCALE 1:15,000
Nautical Miles

See Note on page 5.





Joins page 7

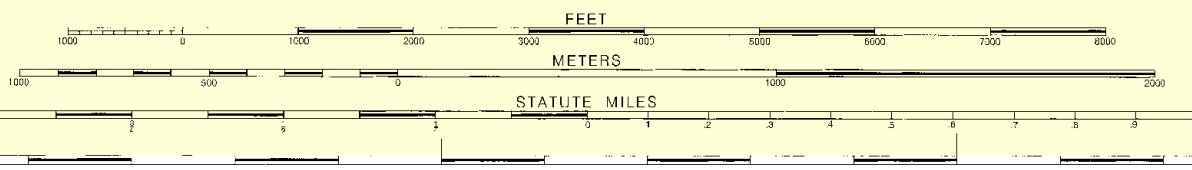


UNITED STATES - GREAT LAKES
LAKE MICHIGAN - MICHIGAN

HOLLAND HARBOR

Polyconic Projection
Scale 1:15,000
North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FEET



56° 08' 86° 07' 86° 06'

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

Holland Harbor
SOUNDINGS IN FEET - SCALE 1:15,000

14932

ED. NO. 23

NSN 764201 4010697

NIMA REFERENCE NO. 14XHA14932

EMERGENCY INFORMATION

VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.

Channel 9 – Communications between boats and ship-to-coast.

Channel 13 – Navigation purposes at bridges, locks, and harbors.

Channel 16 – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other vessels. Contact the other vessel, agree to another channel, and then switch.

Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.

Channels 68, 69, 71, 72 & 78A – Recreational boat channels.

Distress Call Procedures

1. Make sure radio is on.
2. Select Channel 16.
3. Press/Hold the transmit button.
4. Clearly say: "MAYDAY, MAYDAY, MAYDAY."
5. Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
6. Release transmit button.
7. Wait for 10 seconds – If no response Repeat MAYDAY Call.

HAVE ALL PERSONS PUT ON LIFE JACKETS !!

Mobile Phones – Call 911 for water rescue.

Coast Guard Search & Rescue (RCC) – 216-902-6117

Coast Guard S & R (Sector Great Lakes) – 616-850-2501

NOAA Weather Radio – 162.400 MHz, 162.425 MHz, 162.450 MHz, 162.475 MHz, 162.500 MHz, 162.525 MHz, 162.550 MHz.

Getting and Giving Help – Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.



NOAA CHARTING PUBLICATIONS

Official NOAA Nautical Charts – NOAA surveys and charts the national and territorial waters of the U.S, including the Great Lakes. We produce over 1,000 traditional nautical charts covering 3.4 million square nautical miles. Carriage of official NOAA charts is mandatory on the commercial ships that carry our commerce. They are used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters. NOAA charts are available from official chart agents listed at: www.NauticalCharts.NOAA.gov.

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Official Electronic Navigational Charts (NOAA ENC[®]) – ENCs are digital files of each chart's features and their attributes for use in computer-based navigation systems. ENCs comply with standards of the International Hydrographic Organization. ENCs and their updates are available for free from NOAA at www.NauticalCharts.NOAA.gov.

Official Raster Navigational Charts (NOAA RNC[™]) – RNCs are geo-referenced digital pictures of NOAA's charts that are suitable for use in computer-based navigation systems. RNCs comply with standards of the International Hydrographic Organization. RNCs and their updates are available for free from NOAA at www.NauticalCharts.NOAA.gov.

Official BookletCharts[™] – BookletCharts[™] are reduced scale NOAA charts organized in page-sized pieces. The "Home Edition" can be downloaded from NOAA for free and printed. The Internet address is www.NauticalCharts.gov/bookletcharts.

Official PocketCharts[™] – PocketCharts[™] are for beginning recreational boaters to use for planning and locating, but not for real navigation. Measuring a convenient 13" by 19", they have a 1/3 scale chart on one side, and safety, boating, and educational information on the reverse. They can be purchased at retail outlets and on the Internet.

Official U.S. Coast Pilot[®] – The Coast Pilots are 9 text volumes containing information important to navigators such as channel descriptions, port facilities, anchorages, bridge and cable clearances, currents, prominent features, weather, dangers, and Federal Regulations. They supplement the charts and are available from NOAA chart agents or may be downloaded for free at www.NauticalCharts.NOAA.gov.

Official On-Line Chart Viewer – All NOAA nautical charts are viewable here on-line using any Internet browser. Each chart is up-to-date with the most recent Notices to Mariners. Use these on-line charts as a ready reference or planning tool. The Internet address is www.NauticalCharts.gov/viewer.

Official Nautical Chart Catalogs – Large format, regional catalogs are available for free from official chart agents. Page size, state catalogs are posted on the Internet and can be printed at home for free. Go to <http://NauticalCharts.NOAA.gov/mcd/ccatalogs.htm>.

Internet Sites: www.NauticalCharts.NOAA.gov, www.NOAA.gov, www.TidesandCurrents.NOAA.gov, www.NOS.NOAA.gov.